hesitate to give it so marked a pre-eminence from the

geographical point of view.

Considerable stress is laid upon the importance of town-sites and the growth of towns. This is as it should be; and we would gladly have seen the peculiarities of every important town-site made clearer by means of small plans, such as are employed in Reclus' great work, and in a few modern atlases. There are excellent general and local maps, in some cases specially prepared, in others adapted from old maps, and in these instances bristling with unnecessary and sometimes mis-spelt place-names, and over one hundred pictorial illustrations, most of which are well chosen. The photograph we reproduce shows the site of Amalfi, concerning which Mr. Chisholm says, in explaining its commercial supremacy over Naples in the Middle Ages: "one may conjecture that in those troubled times merchants felt more secure on a site so well defended by nature on the side of the land as Amalfi." The disastrous landslip which occurred since the book was published gives a hint of the price exacted by nature from the posterity of the merchants who acquired this defended position.



Fig. r.—Amalfi.

Not the least interesting part of the book is furnished by the footnotes and parentheses, which abound in curious or illustrative statements in the tersest form. These are often explanations of the forms of placenames, or the pronunciation of the more uncouth Slavonic consonants, or the briefest comparative statistics. Mr. Chisholm has studied the question of geographical orthography, and introduces some forms of Russian transliteration not usually employed, such as the terminal letter \tilde{n} . The difficult matter of the rendering of the Russian e is not yet fully grappled with, its phonetic value ve is not, for instance, given in the case of Ekaterinburg, nor in Kiev. The spelling Kossack is surely wrong; if the usual form Cossack (which occurs in one place) is departed from, the only reasonable forms to adopt would appear to be Kossak or Kosak. These, however, are matters which do not affect the quality or the value of the book.

Amongst the larger maps it is interesting to notice one of the geology of Europe, in which the colour-scheme of the International Geological Map is employed. It has a striking and interesting appearance; but its legibility would be improved by the adoption of reference initials, to enable similar colours to be distinguished. The Permian and Devonian, in particular, are very much alike in small patches.

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THE UNIVERSITY OF LONDON ELECTION.

THE University of London has preserved its dignity by returning Sir Michael Foster as its Parliamentary representative. From the commencement of the contest he led the way, and when the poll was declared on Monday the numbers were: Sir Michael Foster, 1271;

Dr. Collins, 863; and Mr. Busk, 586.

That such a large majority should have been obtained, in spite of the fact that Sir Michael Foster entered the field nearly a fortnight after his opponents, is a result which was scarcely anticipated by the most sanguine of his supporters, and is therefore all the more satisfactory. It shows that the majority of the electors are capable of taking a broad view of their responsibilities, and that a University constituency is not influenced by the political practices found successful elsewhere. The graduates may rest assured that Sir Michael Foster will guard their privileges, and promote the progress of Science and Learning in the House of Commons. The following remarks, made by the new member for the University after the declaration of the poll on Monday,

as reported in the *Times*, will convince the whole body of graduates that a representative in every respect worthy of the electorate has

been sent to Parliament.

Sir Michael Foster said that the graduates had for the first time in the history of the University returned to Parliament one of themselves. He wished to be allowed to state how deeply he felt the honourable and proud position in which they had placed him. He took it that in the main they sent him to Parliament, not that he should add one more unit to this party or to that, but that he should place at the disposal of the House the somewhat special experience which he had gained in science and learning. But the Government of this country was by party, and there were only two sides to the House, on one of which he must sit. Even if he were the superior person he had been called by some newspapers, he could not expect to sit in an isolated chair, and he must respond to the lash of the Whips of one side or the other. He had carefully considered on which side of the House he should sit, and he had come to the conclusion that it was only consistent with the opinions which he had expressed concerning the present war, and with the feelings which he had as to the supreme importance of strengthening the

bonds of our great colonies with this little island, that he should first of all, at all events, take his seat among the supporters of the present Government. But he took it that he might so order his ways that he did not sacrifice to party demands, or jeopardise by party action, the opportunities that he might have of forwarding in the House all interests of science, learning and education. He was subject to tradition. As one who was born in the same town as Oliver Cromwell, who was married from the house in which he dwelt, as one whose forefathers—obeying what they thought their consciences—sheltered their friend John Bunyan when he preached outlaw sermons in the woods of Hertfordshire, he felt that tradition wrapped him so about that the war cry of civil and religious liberty always made him prick his ears. Without saying what exact meaning in the new order which had given place to the old wich he attached to these words; its latest meant this to him. might be attached to those words, it at least meant this to him that the affairs of the nation should not be conducted either to the detriment or to the advantage of any particular set of religious opinions. He believed that that was not his tradition only, but the tradition of that University. The University began as University College, and that college was founded, not simply for local reasons, but to afford the highest academical training to those to whom access was more or less denied to the older Universities. And he had a tradition in the University itself. To the University in its old form he owed all that he had. It had made him what he was. Did they think it was likely, therefore, that he should take any steps which he believed

would tend to deny to others the good which he himself had received? He confessed that he did not wholly understand the cry which had been raised of the external student-the cry which had been used, and, if he might say so, skilfully used, to clog the voting in his favour. When he listened to some expressions it seemed to him that the cry meant "We are in possession, and we are unwilling that others should share it with But he could not believe that to be meant, because it was a spirit which was wholly repugnant to the spirit of the University. And in any case he himself, looking all round, could not think otherwise than that the great future which he believed lay before the University in its new form would bring good to all alike who took part in it. At all events, he should hold it to be his duty to labour in the House, not for the interests of any particular class of the University, be they doctors or lawyers, men of letters, men of science, or men of business, internal or external students, teachers or taught, men or women, but he should strive to do his best for the common good of all.

NOTES.

THE sum of 3000%, previously allotted for the purchase of plant for the detachment of the Electrical Engineers Volunteer Corps going to the front, is to be increased to 5000%.

THE death is announced of M. Emile Blanchard, member of the Paris Academy of Sciences, in the section of anatomy and zoology.

The introduction of the metric system of weights and measures in Russia seems to be not far off. A scheme to that effect, prepared by the Ministry of Finances, has already received the approval of the Council of State, on the condition that it should be supplemented by a scheme for organising the aid, which different scientific societies and the universities are ready to render, in the verification of the new weights and measures for commerce. This latter scheme is nearly ready, and will shortly be brought before the Council of State. In the military pharmacopæia, published in 1896, all measures are already given in the metric system, which has thus been rendered obligatory for the medical staff of the army.

WE learn that traffic has just been opened on the Trans-Baikalian section, 700 miles long, of the Siberian railway, as far as Sryétensk. This little town, situated on the Shilka, is in the summer the head of a regular steam-navigation along the Amur, and, with the interruption offered by Lake Baikal, which has still to be crossed on a steamer, Sryétensk can now be reached by rail from Moscow, a distance of about 5000 miles.

AT the last meeting of the French Astronomical Society. Baron La Baume Pluvinel gave an account of the results of his inquiry into the conditions for observing the forthcoming total solar eclipse in Spain. He said that the railway service is bad; trains are very slow, and only leave Madrid once a day. The chief party of the Society will make their observations from Alicante, which is situated at the base of a high cliff, crowned by the strong Fort St. Barbara, and on one side sinks sheer down to the sea. A friend of the Society has placed a steamer at the disposal of the observers, free of charge. In addition to this steamer moored off the coast of Spain, another, with a party of astronomers on board, will go to Algiers. Mr. Percival Lowell and Prof. D. P. Todd have already left the United States to proceed to some suitable station in North Africa, from which to observe the eclipse. Mr. A. E. Douglass will make simultaneous observations under Mr. Lowell's auspices in Georgia. Messrs. Cook and Son have arranged a conducted tour to Talavera, where the total phase will be visible. The party will leave London on May 21, and will visit Paris, Bordeaux, Biarritz, and Madrid on the way WE learn from Science that the American Academy of Arts and Sciences has granted from the income of the Rumford fund 500 dollars to Prof. E. C. Pickering, for the purpose of carrying out an investigation on the brightness of faint stars, by co-operation with certain observatories possessing large telescopes, and 100 dollars to Prof. T. W. Richards, in aid of a research on the transition points of crystallised salts.

MENTION has already been made of many of the congresses to be held in connection with the forthcoming International Exposition at Paris. The following list, prepared by the committee of the Paris International Assembly, the secretaries of which are Prof. Patrick Geddes and Mr. T. R. Marr, shows the dates of some of the more important congresses announced in science and education: - Pure Science: Ornithology, June 26-30; meteorology, July 23-28; physics, August 6-11; mathematics, August 6-11; geology, August 16-28; electricity, August 18-25; anthropology and archæology, August 20-25; psychology, August 22-25; ethnography, August 26-September 1; chemistry, September 20.29; botany, October 1-6. Applied Science and Associated Industry: Horticulture, May 25-27; forestry, June 4-7; mines and metallurgy, June 18-23; vine cultivation, June 20-23; insurance, June 25-30; actuaries, June 25-30; agriculture, July 1-7; testing of materials, July 9-16; steam engines and machinery, July 16 18; applied mechanics, July 19-25; architecture and naval construction, July 19-21; photography, July 23-28; applied chemistry, July 23-31; navigation, July 30-August 4; pharmacy, August 8; economic and commercial geography, August 23-31; tramways, September 10-12; fruit culture, September 13-14; railroads, September 20-29. Medicine and Hygiene: Homocopathy, July 18-21; professional medicine, July 23-28; medicine, August 2-9; dermatology, August 29; dentistry, August 8-14; hygiene, August 10-17; hypnotism, August 12-15. Education: Modern language teaching, July 24-29; higher education, July 30-August 3; teaching of social science, July 30-August 5; primary education, August 2-5; secondary education, August 2-5; technical, industrial education, August 6-11; educational press, August 9-11; bibliography, August 16-18; teaching of drawing, August 29-September 1; popular education, September 10-13; agricultural instruction, September 14-16.

THE death is announced of Prof. Thomas Egleston, Professor of mineralogy and metallurgy in the school of mines of Columbia University, at the age of sixty-seven years.

Science announces that Prof. Reginald A. Fessenden, of the electrical engineering department of the Western University of Pennsylvania, has resigned his chair to accept a position in the Signal Department of the United States Weather Bureau, at Washington.

THE Simplon tunnel is now progressing at the rate of sixteen feet per day. It was begun fourteen months ago, and must be finished in five years and a half from its commencement.

THE proposal of the Council of the Royal Astronomical Society, that the meetings should in future be held at five o'clock, was rejected by the annual meeting on Friday last, and the ordinary meetings will therefore continue to be held at eight o'clock. Taylor's Calendar of the meetings of the scientific bodies of London shows that the number of societies which commence their meetings about eight o'clock is more than twice as great as the number of those which meet at four or five o'clock.

WE learn from the Scientific American that a special commission has been appointed to report on the ruins of the cliff-